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gums and colloids and the desensitizing compound is potassium nitrate, potassium citrate or a mixture thereof.

5. A toothpaste according to claim 4 which comprises 0.8 to 3% of alkali metal lauryl sulfate, 15 to 35% of silica, 15 to 40% of a mixture of two or more of glycerol, sorbitol and polyethylene glycol of molecular weight in the range of 200 to 1,000, 0.3 to 3% carrageenan, carboxymethylcellulose, xanthan or a mixture thereof, 1.5 to 4% of said pyrophosphate, 3 to 8% of potassium nitrate, and enough alkali metal fluoride to supply 400 to 1,500 ppm of fluoride ion in the composition, and 25 to 45% of water.

6. A toothpaste according to claim 4 which comprises 0.8 to 3% of alkali metal lauryl sulfate, 15 to 35% of silica, 15 to 40% of a mixture of two or more of glycerol, sorbitol and polyethylene glycol of molecular weight in the range of 200 to 1,000, 0.3 to 3% of carrageenan, carboxymethylcellulose, xanthan or a mixture thereof, 1.5 to 4% of said pyrophosphate, 3 to 8% of potassium citrate, and enough alkali metal fluoride to supply 400 to 1,500 ppm of fluoride ion in the composition, and 25 to 45% of water.

7. A toothpaste according to claim 5 which comprises 0.8 to 1.5% of potassium lauryl sulfate, 15 to 30% of amorphous hydrated silica, 5 to 20% of glycerol, 5 to 25% of sorbitol, 1 to 10% of polyethylene glycol of molecular weight in the range of 400 to 800, 0.5 to 2% of carrageenan, 2 to 3% of said pyrophosphate, 4 to 6% of potassium nitrate, 0.3 to 0.4% of potassium fluoride and 30 to 40% of water.

8. A toothpaste according to claim 6 which comprises 0.8 to 1.5% of potassium lauryl sulfate, 15 to 30% of amorphous hydrated silica, 5 to 20% of glycerol, 5 to 25% of sorbitol, 1 to 10% of polyethylene glycol of molecular weight in the range of 400 to 800, 0.5 to 2% of carrageenan, 2 to 3% of said pyrophosphate, 4 to 6% of potassium nitrate, 0.3 to 0.4% of potassium fluoride and 30 to 40% of water.

9. A toothpaste according to claim 7 which comprises about 1.2% of potassium lauryl sulfate, about 23% of precipitated amorphous hydrated silica, about 10% of glycerol, about 16% of sorbitol, about 3% of polyethylene glycol of molecular weight of about 600, about 0.8% of carrageenan, about 2.5% of said pyrophosphate, about 5% of potassium nitrate, about 0.3% of potassium fluoride and about 30 to 35% of water.

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10. A toothpaste according to claim 8 which comprises about 1.2% of potassium lauryl sulfate, about 23% of precipitated amorphous hydrated silica, about 10% of glycerol, about 16% of sorbitol, about 3% of polyethylene glycol of molecular weight of about 600, about 0.9% of carrageenan, about 2.5% of said pyrophosphate, about 5% of potassium citrate, about 0.3% of potassium fluoride and about 30 to 35% of water.

11. A toothpaste according to claim 1 in which said polyphosphate is tetrasodium pyrophosphate.

12. A process for the preparation of a desensitizing anti-tartar toothpaste according to claim 4 which comprises mixing together glycerol and polyethylene glycol components of the humectant component of such a toothpaste formula, dispersing in such mixture the thickener, copolymer, alkali metal fluoride and sodium pyrophosphate, with mixing, until the mixture becomes a slurry, adding water to the resulting slurry, admixing with the thinned slurry potassium nitrate and/or potassium citrate, to produce a gel phase, neutralizing the copolymer in the gel phase with alkali metal hydroxide, to a pH in the range of 6 to 8, with mixing, and continuing such mixing for 10 to 30 minutes under a vacuum in the range of 5 to 50 millimeters of mercury, to produce a paste or gel and mixing for 3 to 10 minutes under a vacuum in the range of 5 to 50 mm of mercury; the toothpaste having a potassium content, in addition to the potassium pain inhibitor, in the range 0.2 to 5% by weight, such potassium being in ionizable form.

13. A process according to claim 12 wherein said alkali metal hydroxide is potassium hydroxide.

14. A process for desensitizing sensitive teeth and reducing tartar and inhibiting tartar formation which comprises applying to said teeth a composition according to claim 2.

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